

We claim:

1. A multifunction tube joint comprising:
  - an elongated body comprising:
    - a main channel longitudinally therethrough;
    - 5 a protrusion thereon, said protrusion having a receptacle therein communicated with said main channel; and
    - a tunnel vertically therethrough;
    - a revolving valve rotably received through said tunnel, said revolving valve having a controlling channel vertically therethrough, said controlling channel is
    - 10 communicable to said main channel;
    - a stem connected to said receptacle, said stem having a stem channel therein, communicable with said main channel;
    - a branch connected to said stem, said branch having a branch channel therein communicated with said stem channel of said stem;
    - 15 a piston valve rod slidably received in said stem channel of said stem with a first end extended out thereof;
    - a button mounted with said first end of said piston valve rod, said button being engagable with said stem; and
    - a spring placed with one end against a bottom of said receptacle of said
    - 20 protrusion and with another end against a second end of said piston valve rod;
    - wherein said piston valve rod is pressed against said spring to let said main channel to communicate with said branch channel through said stem channel, said piston valve rod being released to block communication between said main channel and said branch channel.

2. The multifunction tube joint as claimed in claim 1 wherein said elongated body further comprising a concave next to said tunnel.

3. The multifunction tube joint as claimed in claim 2 further comprising a compression spring received in said concave and a positioning ball placed on top of said compression spring, said positioning ball being engaged with said revolving valve for controlling rotation thereof.

4. The multifunction tube joint as claimed in claim 3 wherein said revolving valve comprising a valve cap and a valve rod mounted to said valve cap, said controlling channel being installed vertically through said valve rod, said valve cap having multiple slots radially installed thereunder for engaging with said positioning ball.

5. The multifunction tube joint as claimed in claim 4 wherein said button comprises an inwardly threaded flange for threadly engaged with an outwardly threaded periphery of a first end of said stem.

6. The multifunction tube joint as claimed in claim 5 wherein said revolving valve comprises two O-ring surrounding said valve rod above and below said controlling channel thereof respectively.

7. The multifunction tube joint as claimed in claim 6 further comprising a C-type coupler coupled to an opposite end of said valve cap, outside of said elongated body.

8. The multifunction tube joint as claimed in claim 7 wherein said stem comprises a recession at a second end thereof, said recession having a larger diameter than a diameter of said stem channel.

9. The multifunction tube joint as claimed in claim 8 wherein said piston valve rod having a block mounted to said second end thereof, said block of said piston valve

rod being engaged with said recession of said stem for restricting movements of said piston valve rod.

10. The multifunction tube joint as claimed in claim 9 wherein said block of said piston valve rod has an O-ring surrounding thereof for sealing said recession of  
5 said stem.

11. The multifunction tube joint as claimed in claim 10 wherein said piston valve rod has an O-ring surrounding thereof for sealing said stem channel.

12. The multifunction tube joint as claimed in claim 11 wherein said button is treadedly engaged with said first end of said stem.

10 13. The multifunction tube joint as claimed in claim 12 wherein said second end of said stem is threadly engaged with said receptacle of said protrusion.

14. The multifunction tube joint as claimed in claim 13 wherein said elongated body having an outwardly thread periphery at a first end thereof.

15 15. The multifunction tube joint as claimed in claim 14 wherein said elongated body having an inwardly thread periphery at a second end thereof.